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#### Science Highlight: Deep UV-Free Electron Laser Achieves Important Milestone Contact: Erik Johnson (erik@bnl.gov)

On February 13, 2002 the BNL Deep Ultra-Violet Free Electron Laser (DUV-FEL) facility achieved an important milestone on the way to its ultimate goal, the production of 100 nm laser light by the process of High Gain Harmonic Generation (HGHG). The DUV-FEL produced laser light at 400 nm at truly unexpected levels by the process of Self Amplified Spontaneous Emission (SASE). Scientists at the facility would have been satisfied to produce SASE laser light at levels only thirty times higher than the spontaneous emission without lasing action, but were pleasantly surprised by a generated laser intensity 20,000 times higher than the spontaneous emission. The performance of the DUV-FEL gives researchers confidence that the goal of 100 nm is indeed within reach. For more information, see: http://nslsweb.nsls.bnl.gov/nsls/sci&tech/scihighlights DUV.htm

## Faculty/Student Research Support Program (FSRSP) Begins Again Contact: Lisa Miller (Imiller@bnl.gov)

The NSLS is happy to announce the resumption of its Faculty Student Research Support Program. This program is designed to encourage new users to the NSLS by supporting faculty/student research groups by covering expenses incurred during exploratory visits to the NSLS and while performing initial experiments. Expenses covered may include travel, housing, per diem, and some incidental costs. For more information and application forms, please see the NSLS website at: http://nslsweb.nsls.bnl.gov/nsls/users/funding

## User Community Award Initiated Contact: Simon Bare (srbare@uop.com)

The Users' Executive Committee (UEC) at the NSLS is instituting a new award to acknowledge an individual from the NSLS user community in recognition of his/her service, innovation, and/or dedication to NSLS users. This is not an award for scientific achievement, but rather for contributions that have improved the quality of science at the NSLS. The award will be presented at the Annual NSLS Users' Meeting on May 21, 2002. The award winner will receive a \$250 cash award. In addition, a UEC Award plaque will be on display in the NSLS lobby and will be engraved with the name of each year's winner. For nomination and other information, please see the NSLS website:

http://nslsweb.nsls.bnl.gov/nsls/users/uec/uec-award-noms.asp

### NSLS Launches New Website Contact: Lisa Miller (lmiller@bnl.gov)

Over the next few months, the NSLS website will be receiving a makeover. The new home page has been designed to provide visitors to the site with the latest news and science highlights from the NSLS. Take a look:

http://nslsweb.nsls.bnl.gov/nsls/

## March 2002 Newsletter is Now Available Contact: Nancye Wright (wright1@bnl.gov)

The March 2002 issue of the NSLS Newsletter is now available online and in print. To receive a printed copy, please email Nancye Wright at wright | @bnl.gov. To view the online version, go to:

http://nslsweb.nsls.bnl.gov/nsls/pubs/newsletters/02-mar.pdf

#### 2002 Dissertation Award in Beam Physics Awarded to NSLS Scientist, Boris Podobedov

Congratulations go out to NSLS scientist, Boris Podobedov, for being awarded a 2002 Dissertation in Beam Physics Award from the American Physical Society. Boris' award was presented for "an experimental study of the microwave instability in the SLC damping rings using a streak camera to correlate each event to the RF. The development of this sophisticated technique provides a powerful tool for the study of non-linear instabilities above threshold." For more information on Boris' award, please see:

http://www.aps.org/praw/dissbeam/02winner.html

# Frontiers for Synchrotron Research on Soft Matter and Biomaterials Workshop: April 25-27, 2002

Contact: Ron Pindak (pindak@bnl.gov)

On April 25-27, a workshop on the utilization of synchrotron-based techniques for soft matter and biomaterials research will be held in Tarrytown, NY (about 45 minutes north of New York City). The workshop will attempt to identify the outstanding problems in the field of soft matter and biomaterials as well as the important refinements in the synchrotron techniques that are required address these research areas. This workshop is sponsored in part by the US Department of Energy and Brookhaven Science Associates. For additional information and online registration:

http://nslsweb.nsls.bnl.gov/nsls/org/workshops/2002-SMB/

# RapiData 2002: A Practical Course in Macromolecular X-Ray Diffraction April 21-26, 2002

Contact: Bob Sweet (sweet@bnl.gov)

The annual RapiData Course in Macromolecular X-Ray Diffraction will take place April 21-26, 2002 at the NSLS. In this course, the ideas behind conventional methods for diffraction data collection will be developed, emphasizing aspects unique to the synchrotron experience (MAD phasing, rapid structure solving). It will consist of a series of lectures and tutorials, and also give students practical experience in work on their own specimens. The course is sponsored in part by a grant from the National Center for Research Resources of the National Institutes of Health. For more information: http://www.px.nsls.bnl.gov/RapiData2002/

NSLS Annual Users' Meeting May 20-22, 2002 Contact: Lydia Rogers (Irogers@bnl.gov)

Registration is now open for the NSLS Annual Users' Meeting, which will take place May 20-22, 2002. Each year, this meeting brings together scientists from many diverse disciplines to share their recent accomplishments and visions of the future. It also provides them with the opportunity to visit with old friends and to forge new relationships. Because the focus of the meeting is on the science produced using synchrotron radiation, the infrequent or new synchrotron user is encouraged to attend. Through workshops, invited talks, the poster session, and the informal interactions, there will be numerous opportunities to learn about new frontiers in synchrotron-based experimentation and how these will impact individual research interests. Full details about the meeting and workshops, and all the latest information, can be found at:

http://nslsweb.nsls.bnl.gov/nsls/users/meeting/Default.htm

#### **User Obligations and Reminders**

<u>Pre-Registration</u>: All users must pre-register <u>for each visit</u>. http://nslsweb.nsls.bnl.gov/nsls/dbforms/user-regis.asp

Foreign Nationals: All foreign nationals must submit Form BNL-473. Those without active appointments must arrive Monday-Friday by 3 p.m. (no weekends/holidays).

http://nslsweb.nsls.bnl.gov/nsls/users/procedures/foreign.htm

**Training:** All users who require training/retraining must arrive Monday-Friday by 3 p.m. (no weekends/holidays).

<u>Publication References</u>: Users (except proprietary) are obligated to submit references for all published work.

http://nslsweb.nsls.bnl.gov/nsls/pubs/pubrefs/Default.htm **Abstracts:** Users are obligated to submit abstracts.

http://nslsweb.nsls.bnl.gov/nsls/pubs/abstracts/submit.asp **End of Run Form:** All users are asked to complete the End of Run survey at the end of each experimental run.

http://nslsweb.nsls.bnl.gov/nsls/dbforms/end-of-run.asp

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http://nslsweb.nsls.bnl.gov/nsls/announcements/listservers.htm#nsls-news

If you would like to suggest a news item, please send a message to nslsinfo@bnl.gov.

The current and past issues of the NSLS e-News are available on the web at:

nslsweb.nsls.bnl.gov/nsls/announcements/nslsonlinenews.htm

Editors: Lisa Miller (Imiller@bnl.gov) and Patrice Pages (pages@bnl.gov)

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#### **NSLS** Information and Outreach Office

National Synchrotron Light Source, Brookhaven National Laboratory P. O. Box 5000, Bldg. 725B Upton, New York 11973-5000 (631) 344-5132 nslsinfo@bnl.gov